



AMENDMENTS TO THE CLAIMS

IN THE CLAIMS

Please amend the claims as follows.

1. (currently amended) A display device, comprising:

a pixel part comprised of pixels arranged in a matrix and having a signal line arranged for each pixel string,

a clock generating means for generating a first clock signal and a first inverse clock signal having inverse phases to each other and serving as a reference for horizontal scanning and generating a second clock signal and a second inverse clock signal having the same period and having a smaller duty ratio than the first clock signal and said first inverse signal based on said first clock signal and said first inverse clock signal,

a shift register for performing a shift operation in synchronization with said first clock signal and said first inverse clock signal outputting a shift pulse in sequence from the shift stages,

a first switch group for sampling said second inverse clock signal or said second clock signal in response to a shift pulse output in sequence from said shift register, and

a second switch group for sampling an input video signal in sequence in response to said second inverse clock signal or said second clock signal sampled by the switches of the first switch group and supplying the sampled input video signal same to the signal lines of the pixel part, wherein:

said second switch group samples the input video signal in response to said second inverse clock signal and supplies the sampled input video signal to said signal lines arranged in the odd columns, and samples the input video signal in response to said second clock signal and supplies the sampled input video signal to said signal lines arranged in the even columns.

2. (original) A display device as set forth in claim 1, wherein a display element of each pixel of said pixel part is a liquid-crystal cell.

3. (currently amended) A method of driving a display device for obtaining shift pulses in sequence in synchronization with a first clock signal and a first inverse clock signal at the time of horizontal scanning with respect to a pixel part comprised by pixels arranged in a matrix and having a signal line arranged for each pixel string and for supplying a video signal to the signal line of said pixel part while sampling the video signal based on these shift pulses, the method comprising:

generating a second clock signal and said second inverse clock signal having the same period and having a smaller duty ratio than the first clock signal and the first inverse clock signal based on the first clock signal and the first inverse clock signal,

sampling the second inverse clock signal and the second clock signal ~~pulse~~ based on the shift pulse ~~and using it as the sampling pulse~~, and

supplying the video signal to a signal lines arranged in odd columns of the pixel part while sampling the video signal by the second inverse clock signal and supplying the video signal lines arranged in even columns of the pixel part while sampling the video signal by the second clock signal. ~~this sampling pulse.~~

4. (original) A method of driving a display device as set forth in claim 3, wherein a display element of each pixel of said pixel part is a liquid-crystal cell.

5. (currently amended) A projection type display device, comprising:

a clock generating means for generating a first clock signal and a first inverse clock signal having inverse phases to each other and serving as a reference for horizontal scanning and generating a second clock signal and a second inverse clock signal having the same period and having a smaller duty ratio than the first clock signal and said first inverse signal based on said first clock signal and said first inverse clock signal,

a display panel having a pixel part comprised by pixels arranged in a matrix and having a signal line arranged for each pixel string and a horizontal driving system for sampling said second inverse clock signal and said second clock signal based on a shift pulse obtained in sequence in synchronization with said first clock signal and said first inverse clock signal and sampling an input video signal in sequence in response to said sampled second inverse clock signal and said second clock signal and supplying the sampled input video signal ~~same~~ to the signal lines of the pixel part, wherein said display panel samples the input video signal in response to said second inverse clock signal and supplies the sampled input video signal to the signal lines arranged in the odd columns, and samples the input video signal in response to said second clock signal and supplies the sampled input video signal to the signal lines arranged in the even columns,

an emitting means for emitting light to said display panel, and

a projecting means for projecting light passing through the display panel to a screen.

6. (original) A projection type display device as set forth in claim 5, wherein a display element of each pixel of said pixel part is a liquid-crystal cell.

Please add the following new claims.

7. (new) A display device as set forth in claim 1, wherein a pulse repetition period is said same period,

the duty ratio of the first clock signal is the ratio of a first clock signal pulse width for the first clock signal to the pulse repetition period, said first clock signal pulse having a repetition rate of once per said pulse repetition period,

the duty ratio of the first inverse clock signal is the ratio of a first inverse clock signal pulse width for the first inverse clock signal to the pulse repetition period, said first inverse clock signal pulse having a repetition rate of once per said pulse repetition period,

the duty ratio of the second clock signal is the ratio of a second clock signal pulse width for the second clock signal to the pulse repetition period, said second clock signal pulse having a repetition rate of once per said pulse repetition period, and

the duty ratio of the second inverse clock signal is the ratio of a second inverse clock signal pulse width for the second inverse clock signal to the pulse repetition period, said second inverse clock signal pulse having a repetition rate of once per said pulse repetition period.

8. (new) A display device as set forth in claim 1, wherein the first clock signal and the first inverse clock signal have the same duty ratio.

9. (new) A display device as set forth in claim 8, wherein the duty ratio the first clock signal and the first inverse clock signal is 50%.

10. (new) A method of driving a display device as set forth in claim 3, wherein a pulse repetition period is said same period,

the duty ratio of the first clock signal is the ratio of a first clock signal pulse width for the first clock signal to the pulse repetition period, said first clock signal pulse having a repetition rate of once per said pulse repetition period,

the duty ratio of the first inverse clock signal is the ratio of a first inverse clock signal pulse width for the first inverse clock signal to the pulse repetition period, said first inverse clock signal pulse having a repetition rate of once per said pulse repetition period,

the duty ratio of the second clock signal is the ratio of a second clock signal pulse width for the second clock signal to the pulse repetition period, said second clock signal pulse having a repetition rate of once per said pulse repetition period, and

the duty ratio of the second inverse clock signal is the ratio of a second inverse clock signal pulse width for the second inverse clock signal to the pulse repetition period, said second inverse clock signal pulse having a repetition rate of once per said pulse repetition period.

11. (new) A method of driving a display device as set forth in claim 3, wherein the first clock signal and the first inverse clock signal have the same duty ratio.

12. (new) A method of driving a display device as set forth in claim 11, wherein the duty ratio the first clock signal and the first inverse clock signal is 50%.

13. (new) A projection type display device as set forth in claim 5, wherein a pulse repetition period is said same period,

the duty ratio of the first clock signal is the ratio of a first clock signal pulse width for the first clock signal to the pulse repetition period, said first clock signal pulse having a repetition rate of once per said pulse repetition period,

the duty ratio of the first inverse clock signal is the ratio of a first inverse clock signal pulse width for the first inverse clock signal to the pulse repetition period, said first inverse clock signal pulse having a repetition rate of once per said pulse repetition period,

the duty ratio of the second clock signal is the ratio of a second clock signal pulse width for the second clock signal to the pulse repetition period, said second clock signal pulse having a repetition rate of once per said pulse repetition period, and

the duty ratio of the second inverse clock signal is the ratio of a second inverse clock signal pulse width for the second inverse clock signal to the pulse repetition period, said second inverse clock signal pulse having a repetition rate of once per said pulse repetition period.

14. (new) A projection type display device as set forth in claim 5, wherein the first clock signal and the first inverse clock signal have the same duty ratio.

15. (new) A method of driving a display device as set forth in claim 14, wherein the duty ratio the first clock signal and the first inverse clock signal is 50%.